Supplementary data for the article:

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Mono- and binuclear Ru(II) arene complexes with (fluoro substituated) picolinic acid: synthesis, characterization and cytotoxicity

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Supporting Information

Table of Contents

SM.1. NMR Spectroscopy

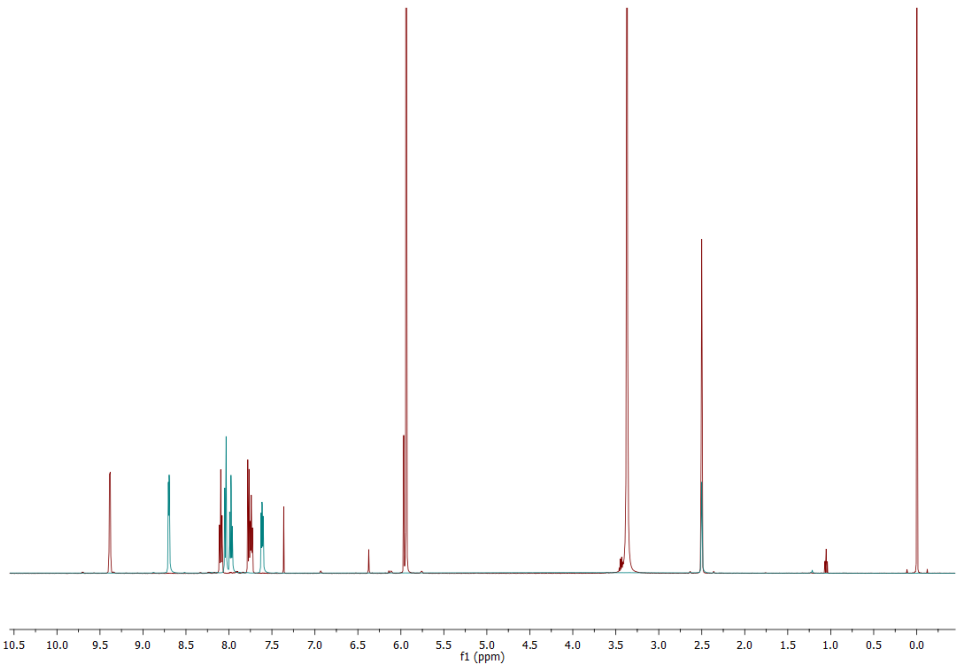

Figure S1: ^{1}H NMR spectra of **1** (red line) overlapped with the ligand, picolinic acid, (green line) recorded in DMSO.

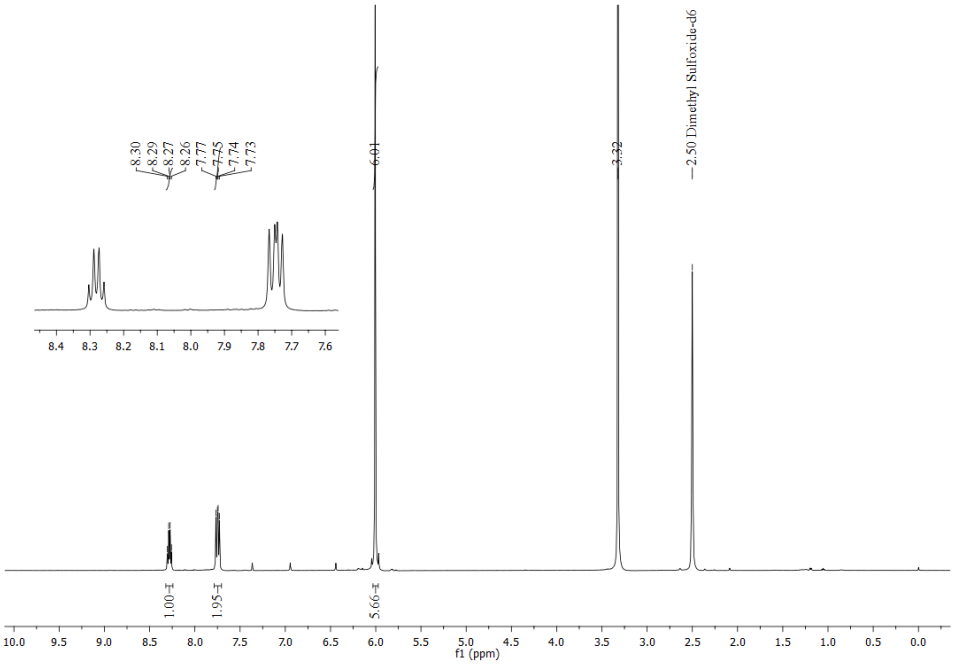

Figure S2: ^{1}H NMR spectrum of **2** recorded in DMSO.

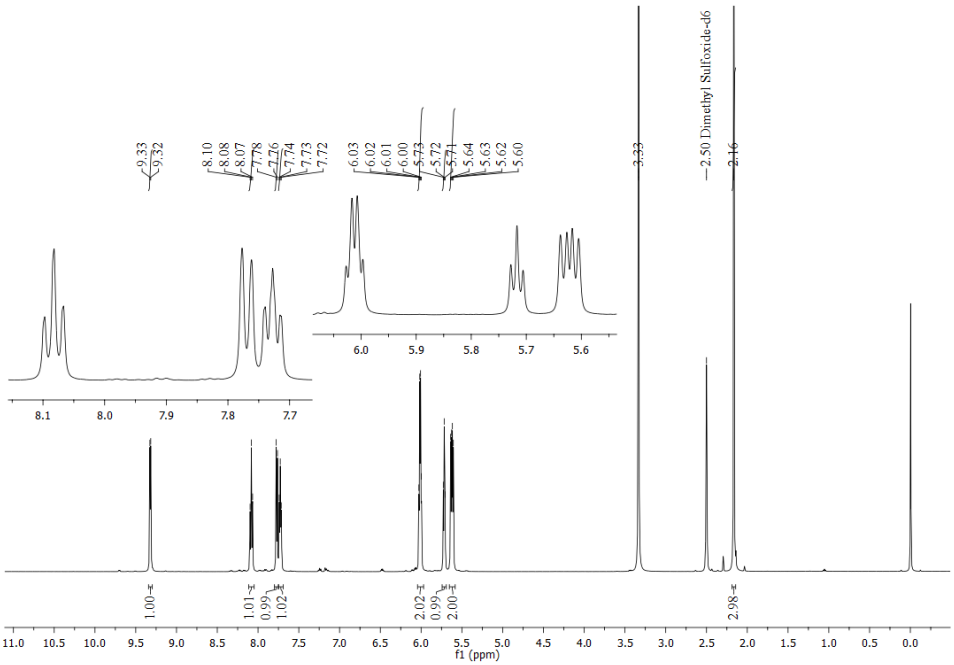

Figure S3: ^{1}H NMR spectrum of **3** recorded in DMSO.

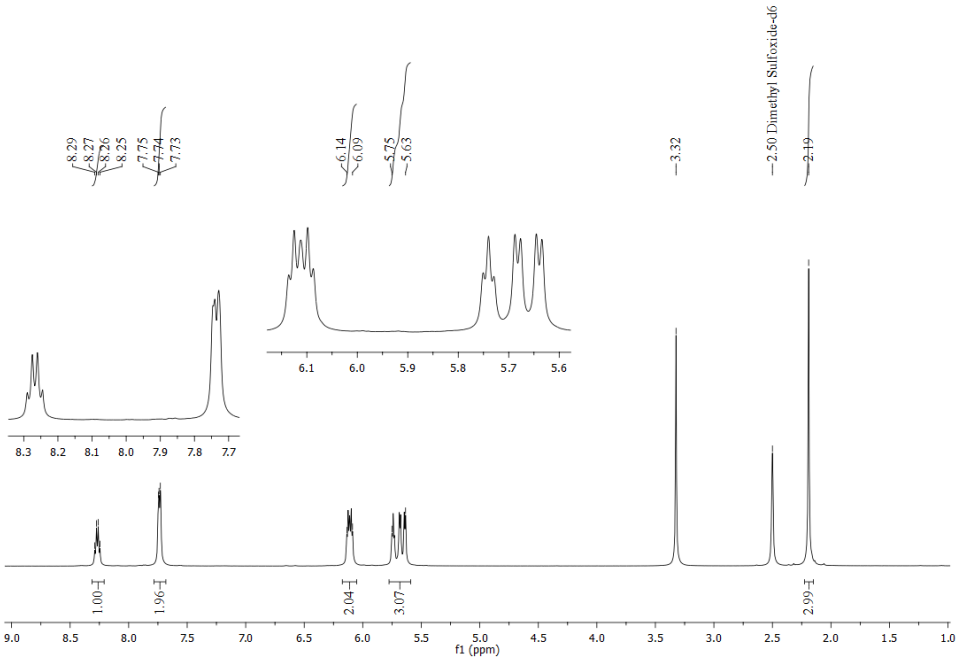

Figure S4: ^{1}H NMR spectrum of **4** recorded in DMSO.

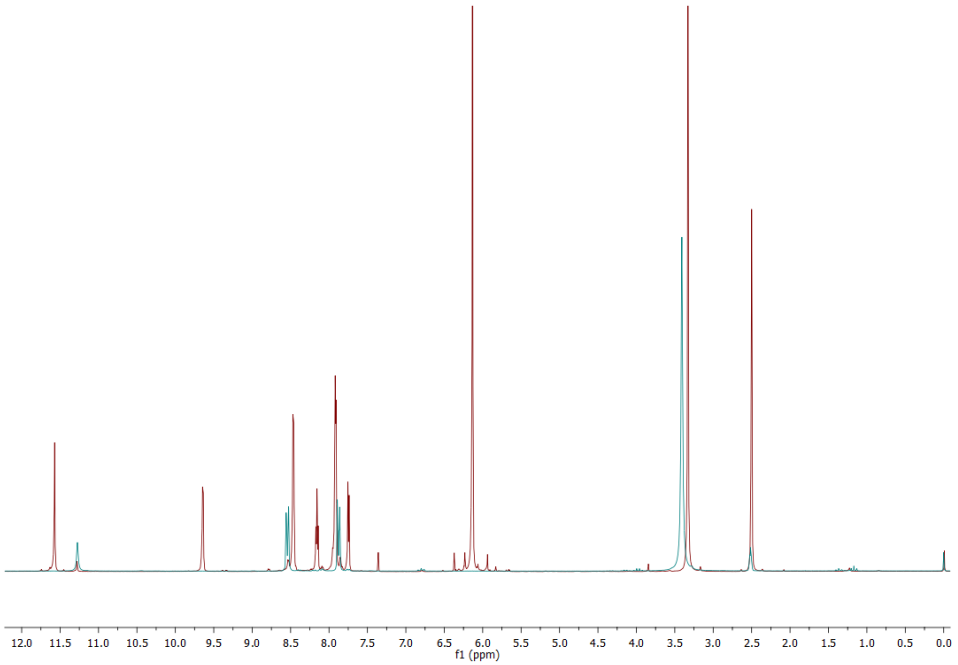

Figure S5: ^{1}H NMR spectra of **5** (red line) overlapped with the ligand, *N*,*N*'-di(4-pyridinyl)ethanediamide, (green line) recorded in DMSO.

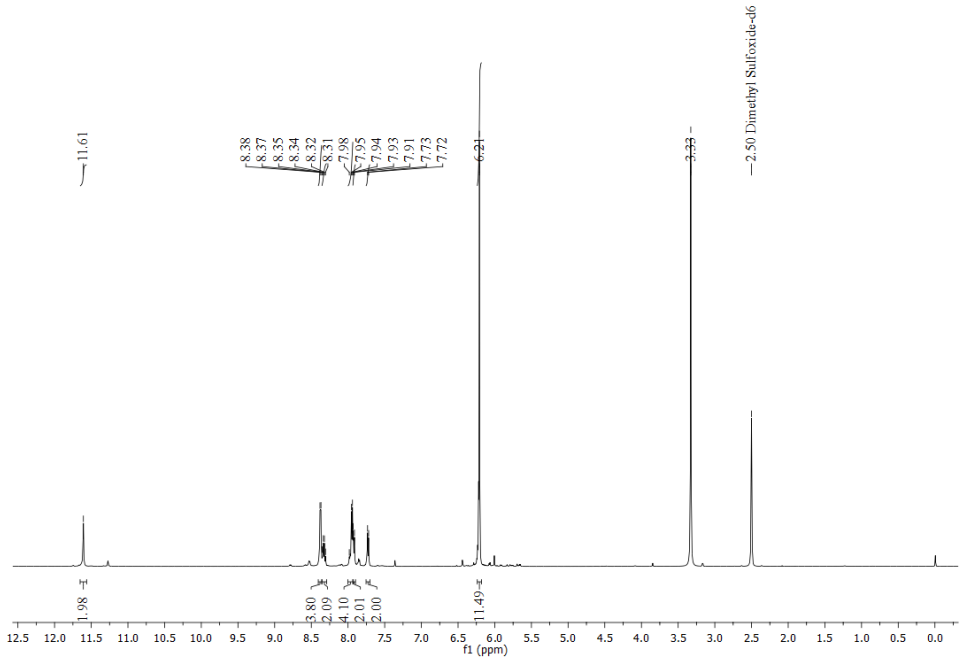

Figure S6: ^{1}H NMR spectrum of **6** recorded in DMSO.

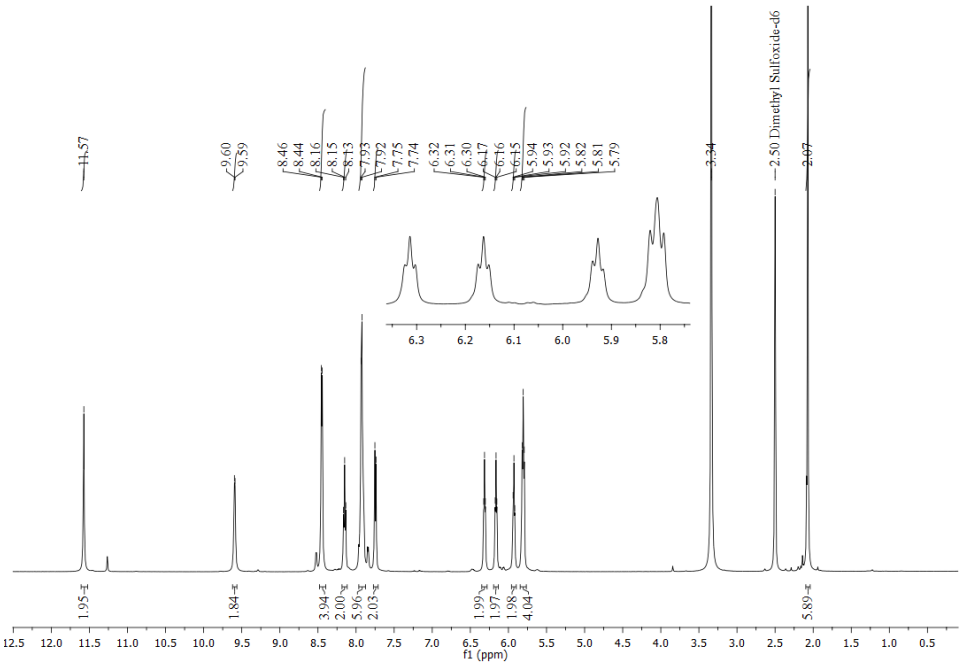

Figure S7: ^{1}H NMR spectrum of **7** recorded in DMSO.

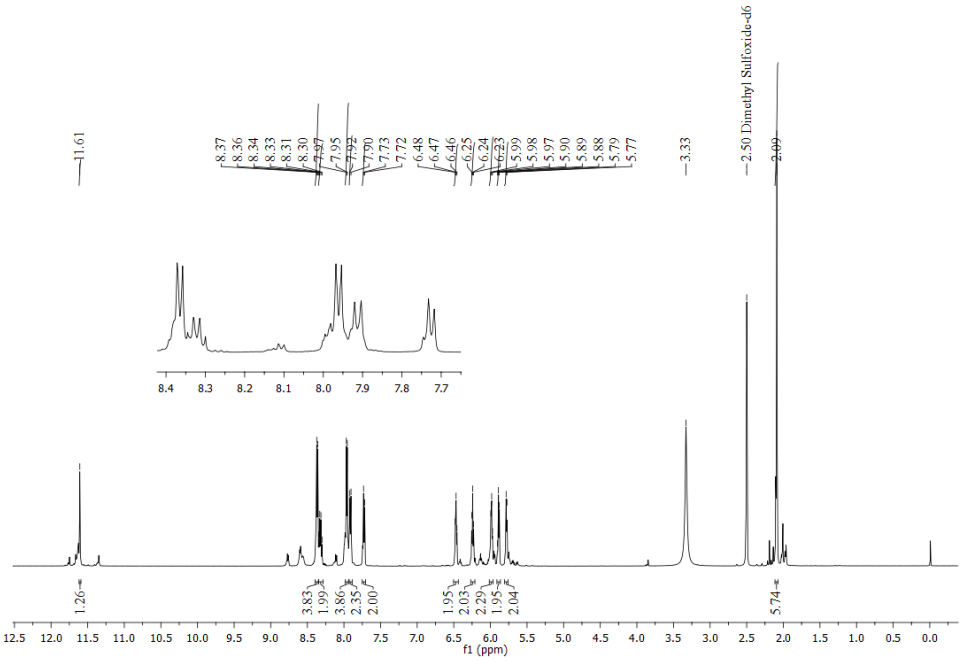

Figure S8: ^{1}H NMR spectrum of **8** recorded in DMSO.

SM.2. Chemical behavior of the Ru(II)-arenes in DMSO

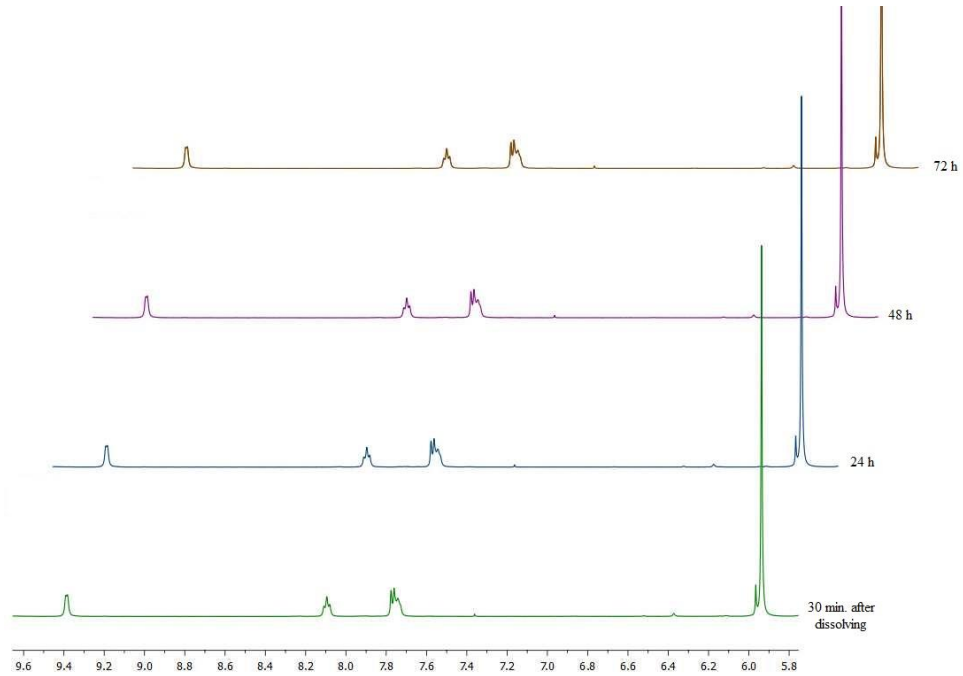

Figure S9: ^{1}H NMR comparative spectra of **1** in DMSO as a function of time (0, 24, 48, and 72 h).

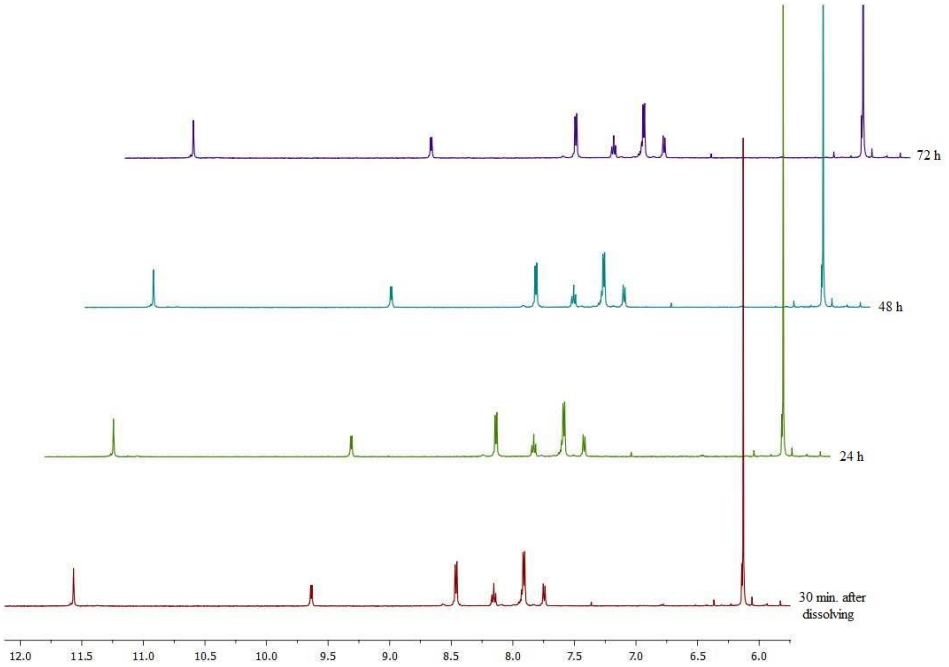

Figure S10: ^{1}H NMR comparative spectra of **5** in DMSO as a function of time (0, 24, 48, and 72 h).

SM.3. Cytotoxicity analysis- Selectivity Index determination

Table TS1. Table shows the values of the Selectivity Index (SI), for **1-8** and cisplatin, calculated as the ratio between IC_{50} (µM) obtained for normal fibroblast cells (MRC-5), and those IC_{50} (µM) values obtained in tumor cells.

SI - Selectivity index								
Compound	**SI_{A549}**	**SI_{HTB177}**	**SI_{PC3}**	**SI_{A375}**	**SI_{HeLa}**	**SI_{HCT116}**	**SI_{MDA453}**	**SI_{A549}**
1	0.3	0.3	0.3	0.5	1.1	1.5	0.6	0.3
2	/*	/	/	0.7	1.1	0.7	0.8	/
3	0.3	0.4	0.2	0.3	0.7	0.6	0.4	0.3
4	/	/	/	/	1.0	0.7	0.7	/
5	0.3	0.3	0.3	0.3	0.7	0.5	0.6	0.3
6	0.4	/	0.4	0.4	0.8	0.5	0.6	0.4
7	0.5	0.4	0.3	0.4	0.8	0.6	0.6	0.5
8	0.5	0.4	0.5	0.5	0.8	0.4	0.7	0.5
Cisplatin	0.3	0.3	0.3	0.5	1.1	1.5	0.6	0.3

* SI was not determined, as IC_{50} ranging above 300 (µM).